

DEPARTMENT OF HEALTH
OFFICE OF THE CHIEF MEDICAL EXAMINER
6600 NORTHSIDE HIGH SCHOOL ROAD, SUITE 100
ROANOKE, VIRGINIA 24019-2836
PHONE: (540) 561-6615

AUTOPSY NO: W-638-21
DAY/DATE: 10/15/2021
TIME: 9:00 AM

REPORT OF AUTOPSY

DECEDENT: WILLIAM FERGUSON
AUTOPSY AUTHORIZED BY: ELI GOODMAN, M.D. ACTING MEDICAL EXAMINER FOR WYTHE COUNTY

BODY IDENTIFIED BY:
L and L Removals

PERSONS PRESENT AT AUTOPSY:
Dr. Goodman and Peri Braxton-Sears

Rigor: Full Livor: Pink-purple, blanching Distribution: Posterior Age: 75 Race: White Sex: Male
Length: 68" Weight: 166# Eyes: Blue Hair: Gray Body Heat: Cold (refrigerated)

PATHOLOGICAL DIAGNOSES:

- I. Contact range penetrating gunshot wound of the torso:
 - a. Entrance: Left chest, with soot
 - b. Wound path: Left anteromedial 5th-7th ribs, pericardium, heart (left ventricle, interventricular septum, right ventricle, distal right coronary artery), lower lobe of the left lung, diaphragm, left upper lobe liver, left upper posterior peritoneal wall
 - c. Associated injuries: Left hemothorax (1200 mL)
 - d. Projectile: Gray metal projectile recovered from soft tissue of left mid back
 - e. Direction: Front to back, downward, no significant left/right deviation
- II. Atherosclerotic and hypertensive cardiovascular disease:
 - a. Cardiomegaly (500 g) with left ventricular hypertrophy (1.8 cm)
 - b. Severe three-vessel coronary artery disease:
 - i. Nearly 100% narrowing of all 3 main coronary arteries
 - c. Severe generalized atherosclerosis
 - d. Marked arteriolonephrosclerosis of right kidney
 - e. Severe aortic valve calcifications with severe aortic stenosis
 - f. Moderate mitral valve calcifications
- III. Marked pulmonary emphysema
- IV. Status post remote left nephrectomy, adrenalectomy, and ureterectomy, history of urothelial carcinoma of the ureter
- V. Status post remote cholecystectomy with surgical clips
- VI. Non-hemorrhagic postmortem fracture of the anterior C7 vertebra


Cause of death: Gunshot wound of the torso

Final Report: 5 pages

The facts stated herein are true and correct to the best of my knowledge and belief.

11/19/2021
Date Signed

OCME Roanoke, Va.
Place of Autopsy


Signature of Pathologist
Eli Goodman, M.D.

Autopsy W-638-21; WILLIAM FERGUSON

EXTERNAL EXAM: The body is of a well-developed, well-nourished, average framed white male whose appearance is consistent with the given age of 75 years. Contact range penetrating gunshot wound of the torso as described below. The scalp hair is gray, short, straight, and receding. A mustache is present. The nose and facial bones are palpably intact. The nares are clean and unobstructed. The ears are normally formed and are atraumatic. Bilateral earlobe creases are present. The ear canals are without drainage. The irides are blue, the corneas are clear and the conjunctivae are without jaundice, hemorrhage, petechiae, or edema. The oral cavity has absent maxillary dentition with upper dentures in place and near absent mandibular dentition with partial lower dentures in place. The oral mucosa is atraumatic. The neck is free of crepitus and hypermobility. The abdomen is flat and without palpable masses. The pubic hair is normally distributed. The external genitalia are atraumatic and of a normal circumcised adult male. Both testes are descended. The back is straight and symmetrical. The anus is atraumatic. The upper and lower extremities are symmetric without clubbing or edema. There is an irregular red-purple contusion on the proximal left flexor forearm, faint senile ecchymosis along the extensor forearms bilaterally, and two pinpoint red abrasions on the left knee. There are no needle tracks. White Tyvek bags cover the hands. Blood is present on the left hand. No visible gunpowder residue or injuries are present on either hand. A gunshot primer residue kit is collected at the time of autopsy. The fingernails are without fresh chips or tears.

SCARS: Vertically oriented midline scar on the lower abdomen, scattered minute irregular scars on the extensor surfaces of the bilateral forearms.

TATTOOS: There are numerous amateur-appearing tattoos, as photographed.

POSTMORTEM CHANGES: Moderate symmetrical rigor mortis of the upper and lower extremities, neck, and jaw is present. Lividity is pink-purple, blanching and in a posterior distribution. The body is cold (refrigerated).

CLOTHING/PERSONAL PROPERTY: The decedent is wearing sneakers x2, socks x2, pants, a belt, briefs, a long sleeve shirt with a full-thickness defect in the left chest, and a T-shirt with a full-thickness defect in the left chest. The shirts with defects are receipted as evidence. Accompanying the body are upper and lower dentures and a dime.

THERAPEUTIC PROCEDURES: None

RADIOLOGY: X-ray of the torso demonstrate foreign radiopacities corresponding to a recovered projectile and unrecovered projectile fragments.

HISTORY: Suicide. Self-inflicted gunshot wound.

CONTACT RANGE PENETRATING GUNSHOT WOUND OF THE TORSO:

ENTRANCE: On the left chest, center 20-1/4 inches from the top of the head and 1-3/4 inches left anterior midline, is a 1/2 inch round gunshot entrance wound with a circumferential symmetrical 1/16 inch marginal rim of abrasion with focal embedded soot. A muzzle abrasion surrounds the wound measuring 1/2 inch in greatest dimension at the 6 o'clock position.

WOUND PATH: The bullet created a hemorrhagic wound path through the skin and subcutaneous soft tissues to perforate the left anteromedial 5th-7th ribs, pericardium, heart (left ventricle, interventricular septum, right ventricle, distal right coronary artery), lower lobe of the left lung, diaphragm, left upper lobe liver, and the left upper posterior peritoneal wall. Associated injuries include 1200 mL of left hemothorax.

PROJECTILE: Recovered within the deep soft tissue of the left upper back is a gray cylindrical projectile fragment consistent with a frangible round. Numerous minute fragments observed on x-ray were not identified.

DIRECTION: The direction of wounding is from front to back, downward, with no significant left/right deviation.

These injuries, having been described, will not be repeated

INTERNAL EXAMINATION:

HEAD: The scalp has no contusion. The skull has no fracture. There is no epidural, subdural, or subarachnoid hemorrhage. The brain weighs 1260 grams and the cranial nerves and cerebral vessels are normally distributed with marked cerebrovascular atherosclerosis. The leptomeninges are thin, clear, and delicate. The brain is symmetrical with normal distributions of white and grey matter, deep nuclei, and ventricles. There are no focal lesions.

NECK: The cervical vertebrae, hyoid bone, tracheal and laryngeal cartilages, and paratracheal soft tissues are without trauma. The upper airway is not obstructed. The tongue is unremarkable. The atlanto-occipital joint is stable. Marked atherosclerosis of the carotid arteries is present. A non-hemorrhagic postmortem fracture of the anterior C7 vertebra is present.

Autopsy W-638-21; WILLIAM FERGUSON

BODY CAVITIES: Injuries and 1200 mL of left hemothorax as previously described. No fluid is present in the right pleural or peritoneal cavities. The organs are in their normal situs without fibrous adhesions.

CARDIOVASCULAR SYSTEM: Injuries as previously described. The heart weighs 500 grams is enlarged. The intact portion of the epicardium is smooth and glistening. The coronary arteries have a normal origin and distribution with right dominance. There is nearly 100% atherosclerotic narrowing of the left anterior descending, left circumflex, and right coronary arteries. The intact portion of the myocardium is uniformly dark red without pallor, hemorrhage, or fibrosis. The left ventricle wall, interventricular septum, and right ventricle wall measure 1.8, 1.0, and 0.4 cm thick, respectively, as measured 1.0 cm below the respective valve annuli. Marked aortic valve calcification with marked aortic stenosis is present. Moderate mitral valve calcification/scalloping is present. The endocardial surfaces and remaining to cardiac valves are unremarkable. The aorta follows its usual course and has severe atherosclerotic changes with extensive calcific ulcerated plaques. There are no vascular anomalies or aneurysms. The venae cavae and pulmonary arteries are without thromboemboli or thrombi.

RESPIRATORY SYSTEM: Injury of the lower lobe of the left lung as previously described. The right lung weighs 550 grams and the left lung weighs 310 grams. The remaining pleurae are smooth and glistening and there is a marked amount of anthracotic pigment deposition. The markedly crepitant pink-purple parenchyma exudes a moderate amount of frothy, serosanguinous fluid from the cut surfaces. There is no focal consolidation, obstruction, or cavitory or mass lesions. The bronchi and vasculature are unremarkable.

LIVER, GALLBLADDER, AND PANCREAS: Injury of the liver as previously described. The liver weighs 1280 grams and has an otherwise intact, smooth capsule with a soft, tan-brown parenchyma without fibrosis or masses. The gallbladder is surgically absent with surgical clips in place. The extrahepatic biliary system is unremarkable. The pancreas is without hemorrhage or mineralization.

HEMIC AND LYMPHATIC SYSTEM: The spleen weighs 170 grams, is firm, and has a dark purple, intact capsule and a dark parenchyma with moderately prominent white pulp. There are no major lymph node enlargements.

GENITOURINARY SYSTEM: The left kidney and left ureter are surgically absent. The right kidney weighs 150 grams and demonstrates a markedly granular and pitted cortical surface. The left ureter maintains uniform caliber into an unremarkable bladder containing 100 ml of yellow urine. The prostate is not enlarged. The testes are unremarkable.

ENDOCRINE SYSTEM: The pituitary, thyroid, and right adrenal gland are normal color, size, and consistency. The left adrenal gland is surgically absent.

DIGESTIVE SYSTEM: The esophagus and gastroesophageal junction are unremarkable. The stomach contains minimal amounts of tan viscous fluid. There are no recognizable fragments of food or pills or tablets. The stomach is unremarkable. The serosal surfaces of the small intestine, appendix, and large intestine are unremarkable.

MUSCULOSKELETAL SYSTEM: The sternum, remaining vertebrae, clavicles, remaining ribs, and pelvis are without fracture. The musculature is normally distributed and unremarkable.

OTHER LAB PROCEDURES:		TOX	PHOTO x	DENTAL	FINGERPRINTS x	HISTO x	RADIOLOGY x	PEDIATRIX
HIV	DNA CARD x	GSR x	ACCELERANTS		BACTERIOLOGY	VIROLOGY	OTHER:	

DISPOSITION OF EVIDENCE:

TYPE	RECIPIENT
None	Toxicology
Chest blood x4, vitreous, urine	OCME (hold)
GSR Kit, projectile, shirts with defects	Investigator
Clothing and personal effects	Funeral Home

MICROSCOPIC DESCRIPTION

SLIDE #/TISSUE	DESCRIPTION
1. ENTRANCE WOUND, LIVER, KIDNEY	Sections of the entrance wound demonstrate skin and subcutaneous tissue with disruption and associated hemorrhage and slight amount of black foreign particulate matter consistent with soot. Sections of the liver demonstrate no significant histopathologic abnormality. Sections of the kidney demonstrate moderate diffuse global glomerulosclerosis with moderate arteriolonephrosclerosis and scattered cystic change.
2. HEART, LUNG, RCA	Sections of the heart demonstrate moderate to severe interstitial and perivascular fibrosis with myocyte hypertrophy. Sections of the lung demonstrate emphysematous change with marked atelectasis, congestion, and focal areas of mild chronic inflammation. Sections of what was supposed to be the right coronary artery demonstrate only adipose and neurovascular tissue.
3. BRAIN	Perivascular and perineuronal clearing.

CASE SUMMARY

According to investigators, this 75-year-old white male was found by stepdaughter with an apparent self-inflicted gunshot wound to the chest. 911 was summoned with police and rescue responding. The decedent was pronounced at the scene. A .380 handgun was found under the decedent's knee. The decedent was recently widowed and he stepdaughter had spread his wife's ashes at that very site this morning.

The autopsy demonstrated a contact range penetrating gunshot wound of the torso that resulted in a lethal injuries of the heart and left lung with resultant massive internal bleeding. The entrance wound was present on the left side of the chest and demonstrated a muzzle abrasion with embedded soot, indicative of contact range.

The location of the wound, range of fire scene investigation, and history are consistent with a manner of suicide.

CAUSE OF DEATH: Gunshot wound of the torso

MANNER OF DEATH: Suicide

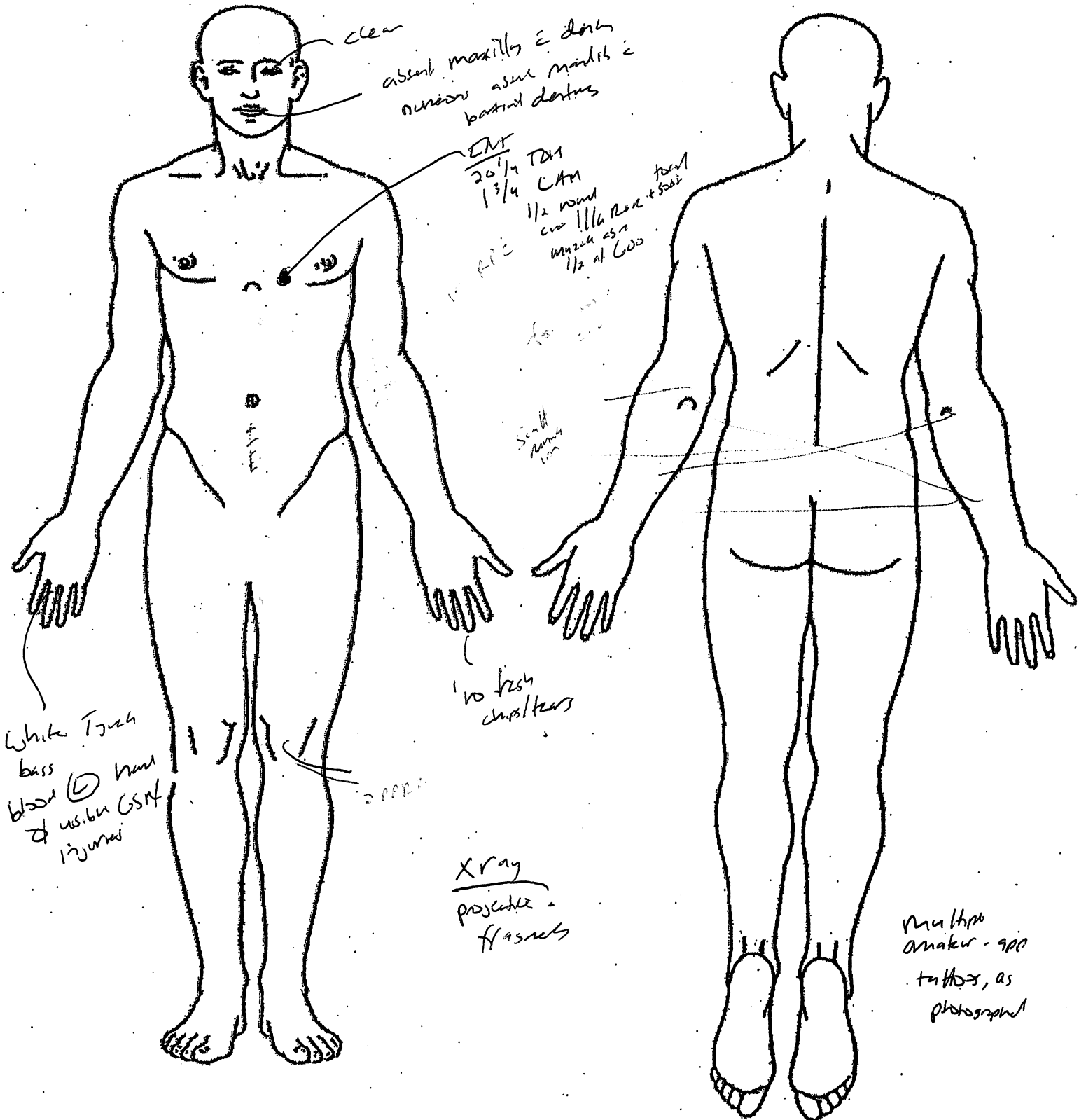
PATHOLOGIST: Eli Goodman, M.D.

AUTOPSY: W-638-21

DATE COMPLETED: 11/19/2021

DECEDENT: WILLIAM FERGUSON

BODY DIAGRAM



W638-21 97931 10/15/2021
 DECEI William Ferguson 75
 Name: Wythe County
 Height: FT _____ Type _____
 Weight: Dr. Goodman

MEDICAL EXAMINER:

Name: _____

Date: _____

Autopsy #: _____



Commonwealth of Virginia

ORIGINAL

DEPARTMENT OF FORENSIC SCIENCE

CERTIFICATE OF ANALYSIS

Western Laboratory
6600 Northside HS Road
Roanoke, VA 24019

January 11, 2022

Tel. No.: (540) 561-6600
Fax: (540) 561-6608

TO: ELI GOODMAN, M.D.
OFFICE OF THE CHIEF MEDICAL EXAMINER
6600 NORTHSIDE H.S. ROAD
ROANOKE, VA 24019-2836

FS Lab # W21-12522

RECEIVED

JAN 21 2022

OFFICE OF THE CHIEF MEDICAL
EXAMINER-WESTERN DISTRICT
Date Received: 12/09/2021

Your Case #: W2021-97931

Victim(s): FERGUSON, William

Suspect(s): ---

Evidence Submitted By: Peri Sears

Item TX1 Four (4) vials of pooled chest blood
Item TX2 One (1) vial of vitreous humor
Item TX3 One (1) vial of urine

RESULTS AND INTERPRETATIONS:

Item TX1
Pooled Chest Blood:
Ethanol none detected
Method: Alcohols by Headspace Gas Chromatography

No drugs and/or drug classes were confirmed.

Item TX1 was screened for the following drugs and/or drug classes:
Ethanol, methanol, acetone, isopropanol, cocaine/benzoylecgonine, opiates, oxycodone/oxymorphone,
methamphetamine/methylenedioxymethamphetamine (MDMA), phencyclidine, fentanyl, methadone, barbiturates, benzodiazepines,
carisoprodol/meprobamate, zolpidem, buprenorphine/norbuprenorphine, diphenhydramine/cyclobenzaprine, dextromethorphan,
tramadol, tricyclic antidepressants, amphetamine/methylenedioxyamphetamine (MDA)/phentermine, alkaline-extractable drugs.

Item TX2
Vitreous Humor:
Not Analyzed

Item TX3
Urine:
Not Analyzed

ENTERED



Commonwealth of Virginia

ORIGINAL

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Western Laboratory
6600 Northside HS Road
Roanoke, VA 24019

January 11, 2022

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Item TX2
Vitreous Humor:
Not Analyzed

Item TX3
Urine:
Not Analyzed

ENTERED



Commonwealth of Virginia

ORIGINAL

DEPARTMENT OF FORENSIC SCIENCE

CERTIFICATE OF ANALYSIS

Office of the Chief Medical Examiner
FS Lab # W21-12522
Your Case # W2021-97931
January 11, 2022

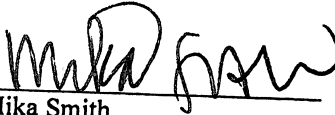
Date(s) of Testing: 12/13/2021 - 01/11/2022

Supporting examination documentation is maintained in the case file. The above-listed methods are the respective quantitation and/or confirmation methods in place at the time of analysis. Current methods can be found in the Toxicology Procedures Manual which can be found at www.dfs.virginia.gov/documentation-publications/manuals/.

The evidence is being returned to the Office of the Chief Medical Examiner.

Attest:

I certify that I performed the above analysis or examination as an employee of the Department of Forensic Science and that the above is an accurate record of the results and interpretations of that analysis or examination.


Mika Smith
Forensic Scientist

MS

Yw
1/12/22

MEDICAL HISTORY

- ☐none known ☐alcoholism ☐cirrhosis ☐hepatitis ☐drug abuse ☐asthma ☐bronchitis ☐emphysema
- ☐seizure disorder (cause) _____ ☒cancer Adenocarcinoma ☐diabetes ☒hypertension ☐atherosclerosis
- ☒stroke ☐psychiatric diagnosis (specify) _____ ☐depression ☐dementia (specify) _____
- ☐recent trauma (specify) _____ ☐hip fracture
- ☐acute infections (specify) _____ ☐HIV/AIDS ☐COPD ☐obesity ☐tobacco
- ☒other (specify): Hypothyroidism, calcification of aortic valve.

Treating MD _____ Phone# _____

Hospitalizations (when/where)

Medications Aspirin, levothyroxine, apixaban, atorvastatin, metoprolol.

Tox requested: NO

Summary of Circumstances:

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EG

Decedent: WILLIAM SANDREL FERGUSON